A clean Version of the abstract.

The invention provides an apparatus and a method for allocating upstream bandwidth of a shared upstream channel of an optical network, the optical network interconnecting an apparatus with at least a first network unit and a second network unit, the method includes the stages of: (i) receiving requests for transmitting information towards the apparatus; and (ii) issuing data grants in response to at least the requests; wherein at least one data grant authorizes a first network unit to transmit data at a first bit-rate during at least one time-slot and at least one other data grant authorizes a second network unit to transmit data at a second bit-rate during at least one other time-slot, whereas the second bit-rate differs from the first bit-rate.